FUTURE FISHERIES IMPROVEMENT PROGRAM
GRANT APPLICATION
(please fill in the highlighted areas)

I. APPLICANT INFORMATION

A. Applicant Name: Trout Unlimited

B. Mailing Address: 111 N. Higgins Ave, Suite 500

C. City: Missoula State: MT Zip: 59802

Telephone: 406-541-1194

D. Contact Person: Casey Hackathorn

Address if different from Applicant:

City: State: Zip:

Telephone:

E. Landowner and/or Lessee Name (if other than Applicant): Beaverhead-Deerlodge National Forest, Pintler Ranger District

Mailing Address: 88 Business Loop

City: Phillipsburg State: MT Zip: 59858

Telephone: 406-859-3211

II. PROJECT INFORMATION*

A. Project Name: Stony Creek Fish Passage Improvement Project

River, stream, or lake: Stony Creek

Location: Township 7N Range 16W Section 21

County: Granite

B. Purpose of Project:

Improve upstream fish passage and reduce ditch entrainment of all fish species including migratory bull trout and westslope cutthroat trout at an irrigation diversion near the mouth of Stony Creek.

C. Brief Project Description:

The Stony Creek Fish Passage Improvement Project will improve an irrigation diversion and install a fish screen on the associated irrigation ditch. The project will provide for year-round upstream fish passage through the diversion dam, reduce entrainment loss of fish down the ditch, and reduce maintenance of the diversion structure.

D. Length of stream or size of lake that will be treated: Project will reconnect 11 miles of Stony Cr

E. Project Budget:

Grant Request (Dollars): $ 23,774

Contribution by Applicant (Dollars): $ 559 In-kind $ 4,480
(salaries of government employees are not considered as matching contributions)

Contribution from other Sources (Dollars): $ 20,000 In-kind $ 0
(attach verification - See page 2 budget template)

Total Project Cost: $ 48,813

F. Attach itemized (line item) budget – see template

G. Attach specific project plans, detailed sketches, plan views, photographs, maps, evidence of landowner consent, evidence of public support, and/or other information necessary to evaluate the merits of the project. If project involves water leasing or water salvage complete supplemental questionnaire (fwp.mt.gov/habitat/futurefisheries/supplement2.doc).

H. Attach land management and maintenance plans that will ensure protection of the reclaimed area.

III. PROJECT BENEFITS*

A. What species of fish will benefit from this project?:

Bull trout, westslope cutthroat, rainbow trout, brown trout, and native non-game species

B. How will the project protect or enhance wild fish habitat?:

The project will maintain upstream fish passage through the only active irrigation diversion on Stony Creek and seek to eliminate entrainment of out-migrating juveniles and adults in the associated irrigation ditch. The project will also improve access to thermal refuge in Stony Creek during periods of high water temperatures on Rock Creek.

C. Will the project improve fish populations and/or fishing? To what extent?:

Stony Creek is an important spawning tributary of upper Rock Creek. The project will improve upstream fish passage and spawning success, particularly for fall-spawning species. The project may improve migratory fish populations and should result in increased recruitment of both native and non-native species to Rock Creek thereby improving fishing opportunity on both Stony Creek and Rock Creek.

D. Will the project increase public fishing opportunity for wild fish and, if so, how?:

Rock Creek is one of the more popular fisheries in the state. Any improvements to the Stony Creek and Rock Creek fisheries will result in increased opportunity for anglers in the area.

E. If the project requires maintenance, what is your time commitment to this project?:

Trout Unlimited is committed to working with the irrigators to ensure proper function of the fish screen and diversion for both fish passage and water delivery.

F. What was the cause of habitat degradation in the area of this project and how will the project correct the cause?:

The irrigation diversion currently poses a partial barrier to upstream fish passage, particularly during periods of low flow. The diversion ditch currently entrains fish, particularly out-migrating adults and juveniles. The project will restore year-round upstream passage through the installation of an improved diversion structure and eliminate fish entrainment through installation of a fish screen.

G. What public benefits will be realized from this project?:

Montana will enjoy the benefits of improved native fish populations that will last into future generations.

H. Will the project interfere with water or property rights of adjacent landowners? (explain):

No.

I. Will the project result in the development of commercial recreational use on the site?: (explain):

No.

J. Is this project associated with the reclamation of past mining activity?:

No.

Each approved project sponsor must enter into a written agreement with the Department specifying terms and duration of the project.

IV. AUTHORIZING STATEMENT

I (we) hereby declare that the information and all statements to this application are true, complete, and accurate to the best of my (our) knowledge and that the project or activity complies with rules of the Future Fisheries Improvement Program.

Applicant Signature: _____ Date: 11-26-2013

Sponsor (if applicable): _____

***Highlighted boxes will automatically expand.**

Mail To: **Montana Fish, Wildlife & Parks**
Habitat Protection Bureau
PO Box 200701
Helena, MT 59620-0701

Incomplete or late applications will be returned to applicant.

Applications may be rejected if this form is modified.

*****Applications may be submitted at anytime, but must be received by the Future Fisheries Program office in Helena before December 1 and June 1 of each year to be considered for the subsequent funding period.*****

Stony Creek Fish Passage Improvement Project Budget
(Revised 11/26/2013)

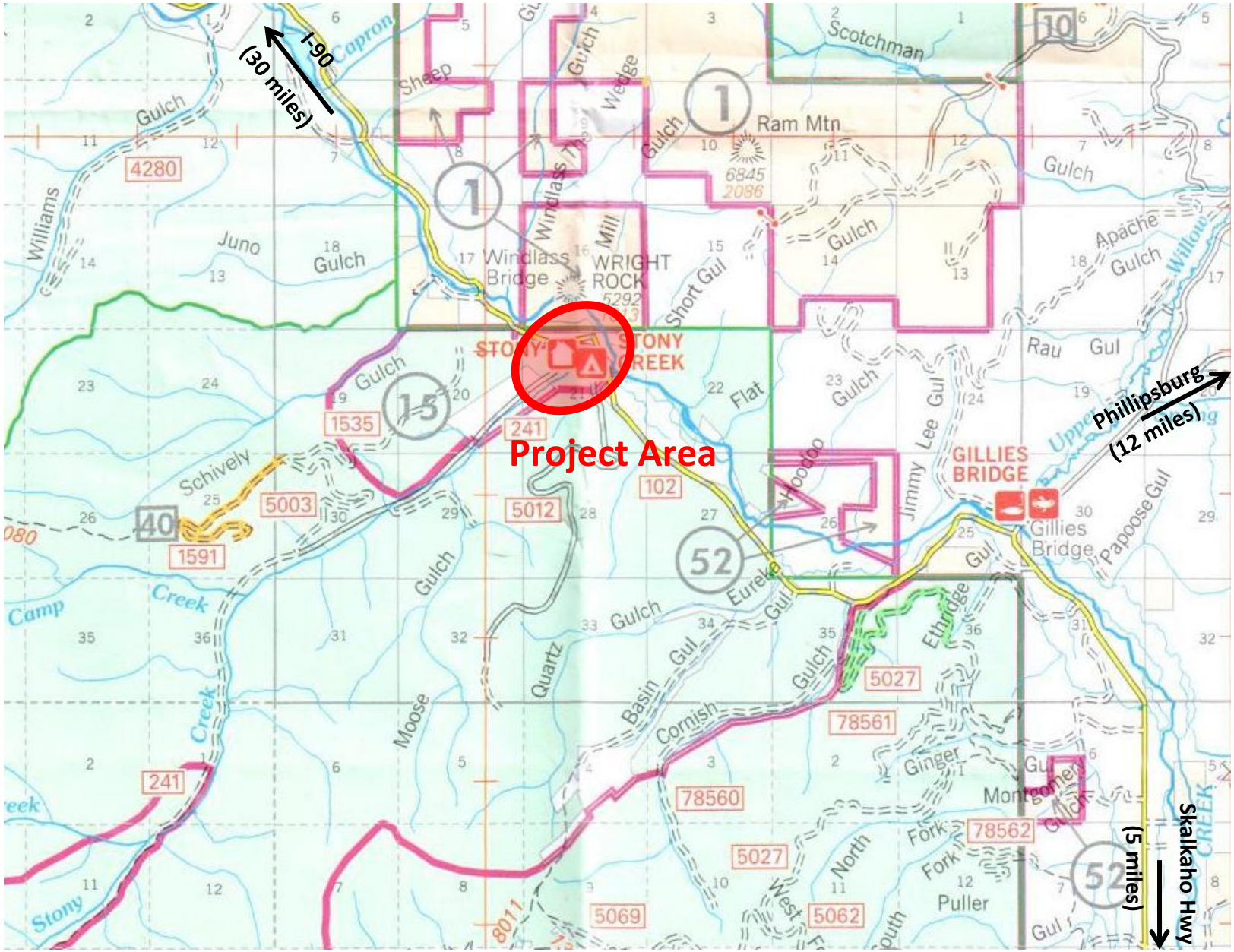
WORK ITEMS (ITEMIZE BY CATEGORY)	NUMBER OF UNITS	UNIT DESCRIPTION*	COST/UNIT	TOTAL COST	CONTRIBUTIONS			
					FISHERIES REQUEST	IN-KIND SERVICES	IN-KIND CASH	TOTAL
Personnel								
Survey	1	LS	$2,000.00	$ 2,000.00			2,000.00	$ 2,000.00
Design	1	LS	$8,000.00	$ 8,000.00			8,000.00	$ 8,000.00
Engineering				$ -				$ -
Permitting	8	HR	$40.00	$ 320.00		320.00		$ 320.00
Oversight	24	HR	$40.00	$ 960.00	960.00			$ 960.00
Labor	24	HR	$30.00	$ 720.00	720.00			$ 720.00
Project Development	56	HR	$40.00	$ 2,240.00		2,240.00		$ 2,240.00
Agency Coordination	24	HR	$40.00	$ 960.00		960.00		$ 960.00
Post Project Monitoring	24	HR	$40.00	$ 960.00		960.00		$ 960.00
Travel								
Mileage	1740	MI	$0.565	$ 983.10	423.75		559.35	$ 983.10
Per diem				$ -				$ -
Construction Materials								
FCA Farmer's Screen	1	EA	$25,000.00	$ 25,000.00	15,000.00		10,000.00	$ 25,000.00
Large Rock (delivered)	43	cubic yard	$50.00	$ 2,150.00	2,150.00			$ 2,150.00
Structural Fill (delivered)	10	cubic yard	$30.00	$ 300.00	300.00			$ 300.00
Equipment								
Excavator and Operator	24	HR	$130.00	$ 3,120.00	3,120.00			$ 3,120.00
Compactor	3	day	$50.00	$ 150.00	150.00			$ 150.00
Skid Steer	3	day	$150.00	$ 450.00	450.00			$ 450.00
Mobilization								
	1	LS	$500.00	$ 500.00	500.00			$ 500.00
			TOTALS	**$ 48,813.10**	**$ 23,773.75**	**$ 4,480.00**	**$ 20,559.35**	**$ 48,813.10**

*Units = feet, hours, inches, lump sum, etc.

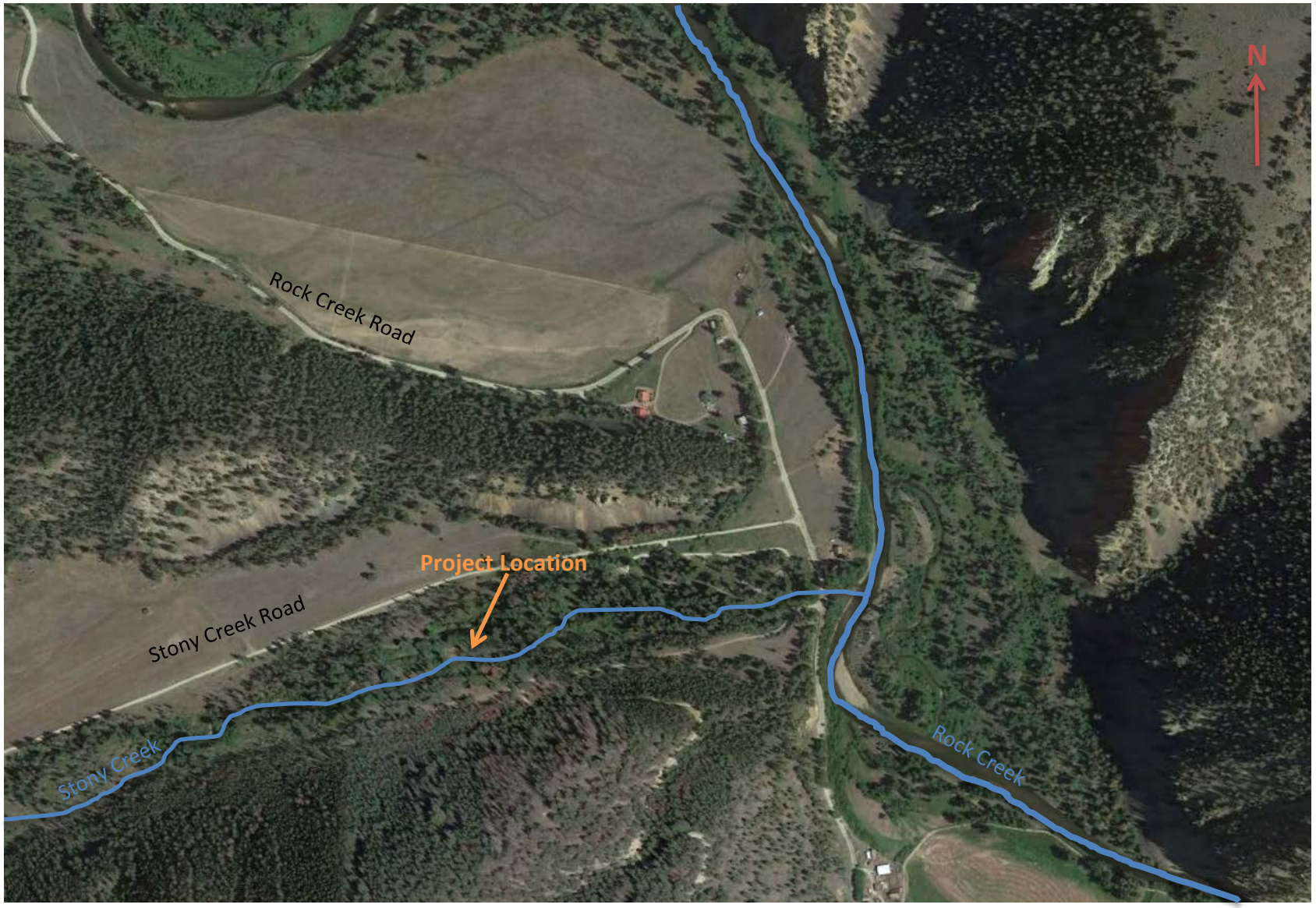
MATCHING CONTRIBUTIONS

CONTRIBUTOR	IN-KIND SERVICE	IN-KIND CASH	TOTAL
Trout Unlimited	$ 4,480.00	$ 559.30	$ 5,039.30
USFWS	$ -	$ 10,000.00	$ 10,000.00
Private landowner/irrigator	$ -	$ 10,000.00	$ 10,000.00
TOTALS	**$ 4,480.00**	**$ 20,559.30**	**$ 25,039.30**

Stony Creek Fish Passage Improvement Project Location



Stony Creek Fish Passage Improvement Project Map

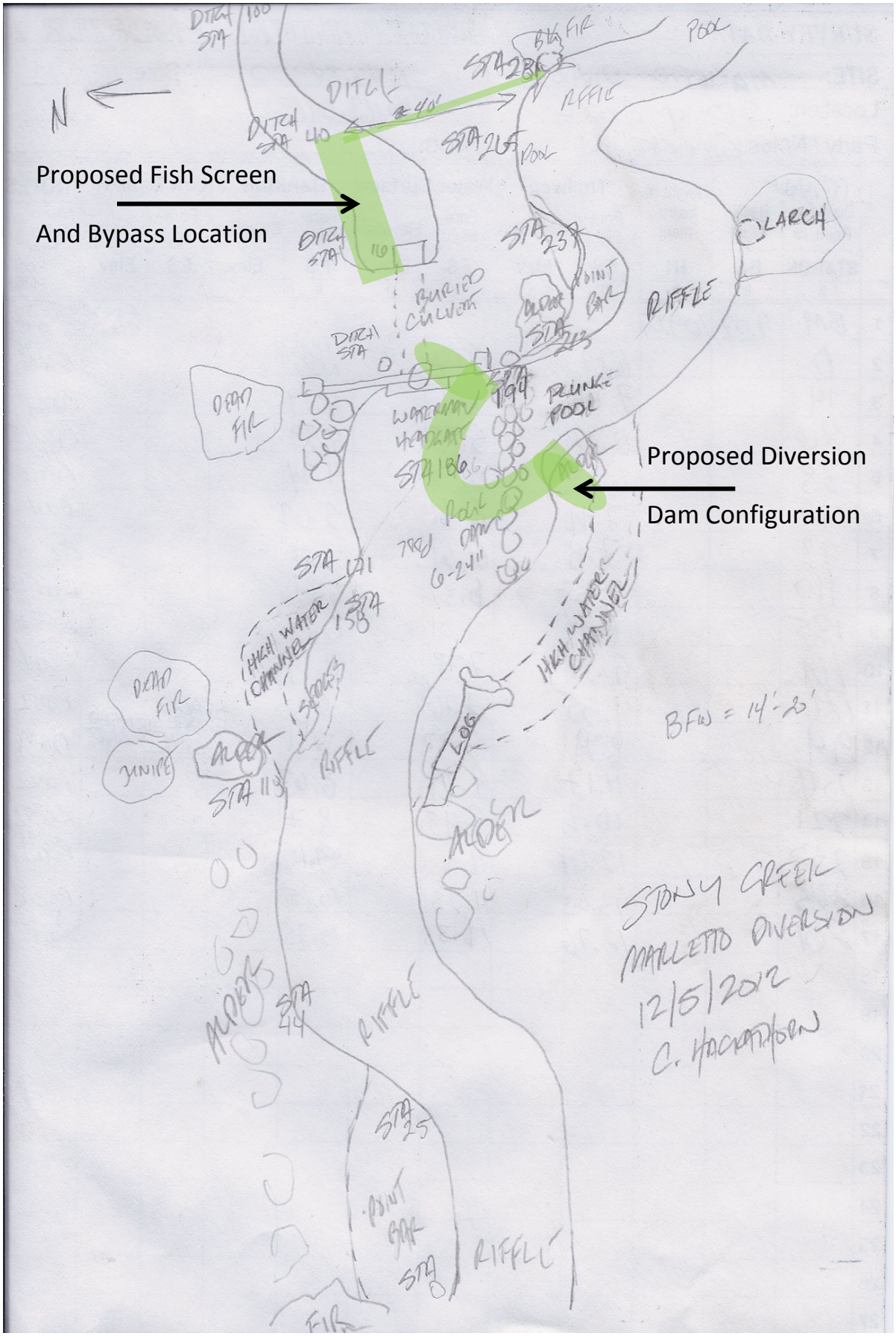


Stony Creek Fish Passage Improvement Project
Site Photographs, September 2013

Diversion and headgate looking downstream

Diversion dam looking upstream from behind headgate

Stony Creek Fish Passage Improvement Project Site Sketch



Example FCA Fish Screen and Rock Cross Vane Diversion Dam (Sixmile Creek, MT)

Excerpt from:
An Inventory of Structures in the Upper Clark Fork River Drainage, Montana**,** Final Report 2011, USFWS Agreement Number- 601818J270, Will Schreck, Ryan Kreiner, Brad Liermann, and Jason Lindstrom, Montana Fish, Wildlife and Parks **(Pages 11 and 12)**

Stony Creek

Stony Creek is a tributary to Rock Creek and enters the drainage at approximately RM 38.4 (Figure 1). Roughly one mile of lower Stony Creek flows through private land, while upper Stony Creek flows through National Forest land. Forest Road 241 (FR 241) follows the lower creek for nearly five miles, while the remainder of the drainage is roadless. Fish populations in upper Stony Creek are comprised entirely of native westslope cutthroat trout and bull trout, while a mix of native and non-native species are present in the lower portion of the drainage. Past electrofishing surveys found non-native brown trout and rainbow trout in lower Stony Creek, with visual evidence of hybridization between westslope cutthroat trout and rainbow trout (Liermann et al. 2008). Fluvial bull trout from Rock Creek are also known to spawn in Stony Creek. In June 2009, a radio-tagged westslope cutthroat trout from the Clark Fork River was relocated at the mouth of Stony Creek and may have spawned in the creek.

One irrigation ditch exists on Stony Creek (Figure 1). The headgate of this ditch is located just above the USFS Stony Creek campground at RM 0.3 in the lower portion of the drainage. This ditch is fitted with a metal slide gate and water is diverted by a gravel berm (Appendix B). The diversion does not likely serve as a barrier to fish passage. In August 2009, a three-pass depletion was conducted from the headgate to a block-net 100 m downstream. A total of 53 westslope cutthroat trout and 53 brown trout were collected in this ditch (Table 2, Appendix A). The population estimate for westslope cutthroat trout was 55.0 fish per 100 m (53.0-59.3; 95% confidence interval (CI)) and for brown trout, 54.0 fish per 100 m (53.0-57.4; 95% CI).

Table 2. Electrofishing data collected during 2009 in a ditch on Stony Creek.

Ditch Name (Section)	Year Sampled	Species	Number of Fish Captured	Fish per 100 m (Depletion)	Mean Length (mm)	Length Range (mm)	Species Comp (%)
RM 0.3	2009	WCT	53	55.0	73	27-139	50
(Headgate)		LL	53	54.0	52	45-60	50

Discharges within the ditch and upstream of the diversion on Stony Creek were measured on August 27, 2009. On this date, the ditch was receiving 0.8 cfs, approximately 7% of the mainstem discharge of 12.5 cfs.

Additional Comments: The diversion dam configuration was changed in 2013 with the addition of concrete blocks resulting in increased impact to upstream fish passage, particularly during low-flow conditions. CDH, 11-29-13

Montana Fish, Wildlife & Parks

72 Rock Creek Road
Clinton, MT 59825
November 29, 2013

Montana Fish, Wildlife and Parks
Attn: Mark Lere
1420 East 6th Ave.
Helena, MT 59620

Future Fisheries Panel:

This memo represents a letter of support for the Stony Creek fish screen and diversion project submitted by Trout Unlimited. Stony Creek is an important tributary to Rock Creek that maintains both migratory bull trout and westslope cutthroat trout populations including spawning habitat for both species. In 2011, Montana Fish, Wildlife and Parks completed an assessment of many irrigation ditches throughout the Upper Clark Fork River drainage and prioritized each based on their importance for native fish species. This ditch and diversion on Stony Creek was classified as "high" priority (highest priority assigned) relative to other ditches in the drainage based on the high densities of westslope cutthroat trout observed during sampling efforts. Bull trout have also been observed in the ditch during previous sampling efforts (Steve Gerdes, former USFS Fish Biologist) and are likely commonly entrained at this site due to the high relative abundance of juvenile bull trout in the drainage and their migratory nature.

If implemented, this project will reduce entrainment of native fish species and non-native game species (brown and rainbow trout) while also providing better passage for fish making seasonal migrations into Stony Creek. Due to a majority of the drainage being in USFS ownership, this irrigation ditch poses one of the largest threats to this population and reducing its impact would significantly reduce threats to these native fish populations. Thank you for considering funding this project and feel free to contact me regarding any questions you might have on this project.

Sincerely,

Brad Liermann, Fisheries Management Biologist
(406)825-5225

From: anthony marletto
To: Casey Hackathorn
Subject: Re: Stony Creek ditch
Date: Tuesday, November 26, 2013 8:22:36 AM

Mr. Mark Lere,

Stony Creek Fish Passage Improvement Project:

As the owner of the largest water right on Stony Creek I would like to express my support for the proposed project and look forward to working with Casey to improve the current delivery system and benefit fish survival in Stony and Rock Creek.
thanks, Tony Marletto Rock Creek Ranch

From: Dan Brewer
To: Casey Hackathorn
Subject: RE: Stony Creek ditch
Date: Wednesday, November 27, 2013 10:56:12 AM

Casey I am glad to hear that TU is taking this project on. Stony Creek supports a Local Population of bull trout and contains designated critical habitat. This project will address one the primary threats to bull trout recovery as identified in the recovery plan (U.S. Fish and Wildlife Service 2002) for this population of bull trout. The Service fully supports this project and looks forward to working with you.
Thanks

Dan Brewer
U.S. Fish and Wildlife Service
Ecological Services
3255 Fort Missoula Road
Missoula, Montana 59804
Office: (406)329-3951
www.fws.gov/montanafieldoffice/
Telework Schedule: Firday
Office Schedule: Monday - Thursday